



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/887,908 | 06/22/2001 | Dominik J. Schmidt | | 7455 |

38236 7590 03/10/2005

DOMINIK J. SCHMIDT
P.O. BOX 20541
STANDFORD, CA 94309

| |
|----------|
| EXAMINER |
|----------|

LA, ANH V

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2636

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,908

Applicant(s)

SCHMIDT, DOMINIK J.

Examiner

Anh V La

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 21-22, 27-28, 33, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Tuttle (US 6,058,497).

Regarding claim 21, Tuttle discloses a method comprising wirelessly receiving a single test command 24 on a plurality of wireless devices 12 formed on a wafer (column 3, lines 28-40) and simultaneously testing the plurality of wireless devices 12 in response to receiving the single test command (see figure 1).

Regarding claim 22, Tuttle discloses switching all of the plurality of wireless devices on to wirelessly receive the single test command (col. 5, lines 30-50, fig. 1).

Regarding claim 27, Tuttle discloses communicating with individual ones of the plurality of wireless devices to receive test results (col. 4, lines 15-25).

Regarding claim 28, Tuttle discloses a unique identifier (col. 4, lines 15-25).

Regarding claim 33, Tuttle discloses a system comprising a test unit 20 to issue a single test command 24 for transmission to a plurality of wireless devices 12 formed on a wafer (col. 3, lines 28-40), the single test command to cause testing of the plurality of wireless devices in parallel and an antenna 22, 46, 66, 62, coupled to the test unit to wirelessly transmit the single test command for receipt by the plurality of wireless devices 12.

Regarding claim 35, Tuttle discloses the test unit to selectively address selected ones of the plurality of wireless devices to receive test results therefrom (col. 4, lines 15-25).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 23, 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Beffa (US 5,966,025).

Regarding claim 23, Tuttle discloses all the claimed subject matter as set forth above in the rejection of claim 21, but does not disclose a transistor coupled to each of the wireless devices. Beffa teaches it is well-known to use a transistor coupled to each of wireless devices to switch on the wireless devices (col. 3, lines 35-65). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a transistor coupled to each of the wireless devices to the method of Tuttle as taught by Beffa for the purpose of effectively switching on the wireless devices.

Regarding claims 29-31, Tuttle discloses all the claimed subject matter as set forth above in the rejection of claim 21, and further discloses eliminating any of the wireless devices that has a defect and conducting various tests on the wireless devices (col. 4, lines 1-16, col. 7, lines 35-45), but does not clearly disclose the various tests

Art Unit: 2636

being failing to identify the wireless device itself (claim 29), failing a volatile memory test (claim 30), and failing a digital circuitry test (claim 31). Beffa teaches the use of various tests being failing to identify the wireless device itself, failing a volatile memory test, and failing a digital circuitry test (col. 3, lines 35-65, col. 8, lines 64-67, col. 9, lines 1-13, col. 12, lines 30-40). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the various tests being failing to identify the wireless device itself, failing a volatile memory test, and failing a digital circuitry test to the method of Tuttle as taught by Beffa for the purpose of effectively conducting various tests on the wireless devices.

Regarding claim 32, Tuttle discloses a mixed signal interface test (col. 8, lines 50-67).

5. Claims 24, 26, 37, 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Brown (US 5,847,951).

Regarding claims 24, 26, Tuttle discloses all the claimed subject matter as set forth above in the rejection of claim 21, but does not disclose a power line formed on each of the wireless devices. Brown teaches the use of a power line formed on each of wireless devices (col. 2, lines 5-20). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a power line formed on each of the wireless devices to the method of Tuttle as taught by Brown for the purpose of effectively wirelessly receiving the single test command.

Regarding claim 37, Tuttle discloses an apparatus comprising a wafer having a plurality of wireless devices 12 formed thereon (col. 3, lines 28-40), the wafer comprising a power connection coupled to each of the wireless devices during a test operation (col. 5, lines 35-50), but does not disclose a power pad and a ground pad coupled to each of the wireless devices. Brown teaches that it is old and well-known to have a power pad and a ground pad coupled to each of the wireless devices (col. 9, lines 20-35). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a power pad and a ground pad coupled to each of the wireless devices to the apparatus of Tuttle as taught by Brown for the purpose of providing power supply voltage to the wireless devices during a test operation and providing a reference voltage to the devices during the test operation.

Regarding claim 39, Tuttle discloses each of the wireless device 12 directly receiving a test command 24 from a tester 20 wirelessly.

Regarding claim 40, Tuttle discloses each of the wireless device 12 comprising a processor and a memory (130, col. 4, lines 55-67).

Regarding claim 41, Tuttle discloses each of the wireless device 12 comprising an analog portion including a cellular radio core 100, a short-range wireless transceiver core 100, 82, 106, 118, and a digital portion 130 including a processor 130 to handle a plurality of wireless communication protocols and a memory 130 (col. 4, lines 55-67).

Regarding claim 42, Tuttle discloses the short-range wireless transceiver core to wirelessly receive signals from a tester without an external antenna (fig. 1 and 3).

Art Unit: 2636

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Brady (US 6,236,223).

Regarding claim 25, Tuttle discloses all the claimed subject matter as set forth above in the rejection of claim 24, but does not disclose one or more pads formed on each of the wireless devices. Brady teaches the use of one or more pads formed on each of wireless devices (col. 5, lines 20-25). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include one or more pads formed on each of the wireless devices to the method of Tuttle as taught by Brady for the purpose of effectively wirelessly receiving the single test command.

7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Deckert (US 6,137,303).

Regarding claim 34, Tuttle discloses all the claimed subject matter as set forth above in the rejection of claim 33, but does not disclose a wafer sorter. Deckert teaches it is well-known to use a wafer sorter coupled to a test unit (fig. 1). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a wafer sorter to the system of Tuttle as taught by Deckert for the purpose of effectively sorting the wafers.

8. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Seki (US 5,986,282).

Regarding claim 36, Tuttle discloses all the claimed subject matter as set forth above in the rejection of claim 33, but does not disclose a single power pad on the wafer. Seki teaches the use of a single power pad Vdd on a wafer (fig. 1). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a single power pad on the wafer to the system of Tuttle as taught by Seki for the purpose of providing power in parallel to the wireless devices.

9. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of Brown as applied to claim 38 above, and further in view of Beffa (US 5,966,025).

Regarding claim 38, Tuttle as modified by Brown discloses all the claimed subject matter as set forth above in the rejection of claim 37, but does not disclose a transistor coupled to each of the wireless devices. Beffa teaches it is well-known to use a transistor coupled to each of wireless devices to switch on the wireless devices (col. 3, lines 35-65). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a transistor coupled to each of the wireless devices to the method of Tuttle (as modified by Brown) as taught by Beffa for the purpose of effectively switching on the wireless devices.

Answer to Remarks

10. Applicant's arguments filed on December 27, 2004 have been fully considered.

Applicant's arguments with respect to claims 21-42 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2636

11. **THIS ACTION IS MADE NON-FINAL.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V La whose telephone number is (571) 272-2970.

The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANH V. LA
PRIMARY EXAMINER

Anh V La
Primary Examiner
Art Unit 2636

AI
March 06, 2005